

**IFWO** 

RAW SEQUENCE LISTING

DATE: 08/27/2004

PATENT APPLICATION: US/10/724,273

TIME: 11:48:30

Input Set: N:\Crf3\RULE60\10724273.raw
Output Set: N:\CRF4\08272004\J724273.raw

#### SEQUENCE LISTING

```
(1) GENERAL INFORMATION:
                                 (i) APPLICANT: Palese, Peter
               5
               6
                                                                      O'Neill, Robert
               8
                               (ii) TITLE OF INVENTION: IDENTIFICATION AND USE OF ANTIVIRAL
              9
                                                                                             COMPOUNDS THAT INHIBIT INTERACTION OF HOST CELL PROTEINS
            10
                                                                                             AND VIRAL PROTEINS REQUIRED FOR VIRAL REPLICATION
                            (iii) NUMBER OF SEQUENCES: 20
            12
                               (iv) CORRESPONDENCE ADDRESS:
            14
                                              (A) ADDRESSEE: Pennie & Edmonds
            15
                                              (B) STREET: 1155 Avenue of the Americas
            16
            17
                                              (C) CITY: New York
                                              (D) STATE: New York
            18
            19
                                              (E) COUNTRY: USA
            20
                                              (F) ZIP: 10036-2711
                                 (v) COMPUTER READABLE FORM:
            22
                                                                                                                                                      A THE TENEDONE AND THE PROPERTY OF THE PROPERT
            23
                                              (A) MEDIUM TYPE: Floppy disk
            24
                                              (B) COMPUTER: IBM PC compatible
            25
                                             (C) OPERATING SYSTEM: PC-DOS/MS-DOS
                                             (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
            26
            28
                               (vi) CURRENT APPLICATION DATA:
                                              (A) APPLICATION NUMBER: US/10/724,273
C --> 29
C--> 30
                                             (B) FILING DATE: 24-Nov-2003
            31
                                             (C) CLASSIFICATION: 514
            32
                            (vii) PRIOR APPLICATION DATA:
            33
                                             (A) APPLICATION NUMBER: US/08/444,994
            34
                                             (B) FILING DATE: 19-MAY-1995
            35
                          (viii) ATTORNEY/AGENT INFORMATION:
            36
                                             (A) NAME: Coruzzi, Laura A.
            37
                                             (B) REGISTRATION NUMBER: 30,742
            38
                                             (C) REFERENCE/DOCKET NUMBER: 6923-054
            40
                              (ix) TELECOMMUNICATION INFORMATION:
            41
                                             (A) TELEPHONE: (212) 790-9090
            42
                                             (B) TELEFAX: (212) 869-9741/8864
            43
                                             (C) TELEX: 66141 PENNIE
                    (2) INFORMATION FOR SEQ ID NO: 1:
            46
            48
                                 (i) SEQUENCE CHARACTERISTICS:
            49
                                             (A) LENGTH: 19 base pairs
            50
                                             (B) TYPE: nucleic acid
            51
                                             (C) STRANDEDNESS: single
            52
                                             (D) TOPOLOGY: linear
     -> 54
                              (ii) MOLECULE TYPE: DNA
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

59

DATE: 08/27/2004

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Input Set : N:\Crf3\RULE60\10724273.raw Output Set: N:\CRF4\08272004\J724273.raw 61 GCAAAGCAGG AGAAACCAC 19 63 (2) INFORMATION FOR SEQ ID NO: 2: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 24 base pairs 66 (B) TYPE: nucleic acid 67 68 (C) STRANDEDNESS: single 69 (D) TOPOLOGY: linear W--> 71 (ii) MOLECULE TYPE: DNA 76 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2: 78 GGGTCCATCT GATAGATATG AGAG 24 80 (2) INFORMATION FOR SEQ ID NO: 3: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 48 base pairs 83 (B) TYPE: nucleic acid 84 85 (C) STRANDEDNESS: single 86 (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA -> 88 91 (ix) FEATURE: 92 (A) NAME/KEY: modified base 93 (B) LOCATION: 36 94 (D) OTHER INFORMATION: /mod base= i 96 (ix) FEATURE: 97 (A) NAME/KEY: modified base 98 (B) LOCATION: 37 99 (D) OTHER INFORMATION: /mod\_base= i 101 (ix) FEATURE: 102 (A) NAME/KEY: modified base 103 (B) LOCATION: 41 104 (D) OTHER INFORMATION: /mod base= i 106 (ix) FEATURE: 107 (A) NAME/KEY: modified base 108 (B) LOCATION: 42 109 (D) OTHER INFORMATION: /mod base= i (ix) FEATURE: 111 112 (A) NAME/KEY: modified base 113 (B) LOCATION: 46 114 (D) OTHER INFORMATION: /mod base= i 116 (ix) FEATURE: 117 (A) NAME/KEY: modified base 118 (B) LOCATION: 47 119 (D) OTHER INFORMATION: /mod base= i 122 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3: 124 CUACUACUAC UAGGCCACGC GTCGACTACT ACGGGNNGGG NNGGGNNG 48 126 (2) INFORMATION FOR SEQ ID NO: 4: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 20 base pairs 129 (B) TYPE: nucleic acid 130 (C) STRANDEDNESS: single 131 132 (D) TOPOLOGY: linear

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/724,273

# RAW SEQUENCE LISTING PATENT APPLICATION: US/10/724,273 TIME: 11:48:30 TABLET SOL : N: Crf3 PHI F60 10724273

Input Set: N:\Crf3\RULE60\10724273.raw
Output Set: N:\CRF4\08272004\J724273.raw

```
(ii) MOLECULE TYPE: DNA
W--> 134
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
     139
     141 TCCTGATGTT GCTGTAGACG
                                                                                   20
     143 (2) INFORMATION FOR SEQ ID NO: 5:
              (i) SEQUENCE CHARACTERISTICS:
     145
     146
                   (A) LENGTH: 20 base pairs
                   (B) TYPE: nucleic acid
     147
                   (C) STRANDEDNESS: single
     148
     149
                   (D) TOPOLOGY: linear
W--> 151
             (ii) MOLECULE TYPE: DNA
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
     156
     158 GCACGACTAG TATGATTTGC
                                                                                   20
     160 (2) INFORMATION FOR SEQ ID NO: 6:
     162
              (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 8 amino acids
     163
     164
                   (B) TYPE: amino acid
     165
                   (C) STRANDEDNESS:
     166
                   (D) TOPOLOGY: unknown
             (ii) MOLECULE TYPE: peptide
     168
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
     173
     175
              Thr Gly Ala Gly Ala Gly Leu Gly
     176
     178 (2) INFORMATION FOR SEQ ID NO: 7:
     180
              (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 5 amino acids
     181
                   (B) TYPE: amino acid
     182
                   (C) STRANDEDNESS:
     183
                   (D) TOPOLOGY: unknown
     184
             (ii) MOLECULE TYPE: peptide
     186
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
     191
     193
              Tyr Ser Ala Ala Lys
     194
     196 (2) INFORMATION FOR SEQ ID NO: 8:
     198
              (i) SEQUENCE CHARACTERISTICS:
     199
                   (A) LENGTH: 27 base pairs
     200
                   (B) TYPE: nucleic acid
     201
                   (C) STRANDEDNESS: single
     202
                   (D) TOPOLOGY: unknown
  -> 204
             (ii) MOLECULE TYPE: DNA
     207
             (ix) FEATURE:
     208
                   (A) NAME/KEY: CDS
     209
                   (B) LOCATION: 1..27
     212
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
     214 GAC TGG CTG GAA TTC CCC ATG GCG TCC
                                                                                   27
     215 Asp Trp Leu Glu Phe Pro Met Ala Ser
     216
           1
                           5
     219 (2) INFORMATION FOR SEQ ID NO: 9:
     221
              (i) SEQUENCE CHARACTERISTICS:
     222
                   (A) LENGTH: 9 amino acids
```

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Input Set : N:\Crf3\RULE60\10724273.raw
Output Set: N:\CRF4\08272004\J724273.raw

	(B) TYPE: amino acid (D) TOPOLOGY: linear																	
226		(ii	) MO	LECU	LE T	YPE:	pro	tein										
228																		
230 Asp Trp Leu Glu Phe Pro Met Ala Ser																		
231 1 5																		
233 (2) INFORMATION FOR SEQ ID NO: 10:																		
235	235 (i) SEQUENCE CHARACTERISTICS:																	
236	· · · · · · · · · · · · · · · · · · ·																	
237	, , , , , , , , , , , , , , , , , , , ,																	
238																		
239																		
241	• • • • • • • • • • • • • • • • • • • •																	
244																		
245	,																	
	246 (B) LOCATION: 471663 249 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:																	
249																		
	251 CTAACTTCAG CGGTGGCACC GGGATCGGTT GCCTTGAGCC TGAAAT ATG ACC ACC 55														55			
252						٠,								Met	Thr	Thr		
253														1				C.
				GAG														103
256 257	Pro	GLY 5	Lys	Glu	Asn	Phe	Arg 10	Leu	Lys	Ser	Tyr	Lys 15	Asn	Lys	Ser	Leu		
259	AAT	CCC	GAT	GAG	ATG	CGC	AGG	AGG	AGG	GAG	GAA	GAA	GGA	CTG	CAG	TTA		151
260	Asn	Pro	Asp	Glu	Met	Arg	Arg	Arg	Arg	Glu	Glu	Glu	Gly	Leu	Gln	Leu		
261	20					25					30					35		
263	CGA	AAG	CAG	AAA	AGA	GAA	GAG	CAG	TTA	TTC	AAG	CGG	AGA	AAT	GTT	GCT		199
264	Arg	Lys	Gln	Lys	Arg	Glu	Glu	Gln	Leu	Phe	Lys	Arg	Arg	Asn	Val	Ala		
265					40					45					50			
				GAA														247
	Thr	Ala	Glu	Glu	Glu	Thr	Glu	Glu	Glu	Val	Met	Ser	Asp	Gly	Gly	Phe		
269				55					60					65				
				CAG														295
	His	Glu		Gln	He	Ser	Asn		GIu	Met	Ala	Pro	_	Gly	Val	Ile		
273	a cim	mam	70	3 ma	3 mm	a . a		75			<u></u>		80					
				ATG														343
	THE		Asp	Met	тте	GIU		тте	Pne	ser	Lys		Pro	Glu	GIn	GIn		
277	COURT	85	007	7 (7	C13. C1	70 70 70	90	7.00		ama.	c.mm	95		~~~	a a m			
				ACA														391
280	Leu	ser	Ата	Thr	GIn		Pne	Arg	ьys	Leu		Ser	Lys	Glu	Pro			
	100	aam	7 mm	C M III	~ n	105	3 ma	3.00	T (7)	aan	110	am.	ama	~~~		115		
				GAT														439
	PLO	PLO	тте	Asp		vaı	тте	ser	ınr		GIY	vaı	vaı	Ala	_	Pne		
285	ama	ana	mm.c	ama	120	CC 3	7. 7. 7.	ar ~	7 T T	125	mc*	are.	a. ~	me-	130	m <i>c</i>		
				CTC														487
	val	GIU	rne	Leu	тух	arg	ьуѕ	GTU		cys	ser	ьeu	GIn		GLu	ser		
289	CCT	שככ	Curv	135	7. (17.	70.70.00	7 (1)(1)	COM	140	CCA	7. 7. 177	шст	CIERCE	145	7.00	003		E 2 E
				CTG														535
292	Ald	ıτþ	val	Leu	ınr	ASN	тте	Αιа	ser	GTA	Asn	ser	ьeu	GIn	Thr	Arg		

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PATENT APPLICATION: US/10/724,273 TIME: 11:48:30

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Input Set : N:\Crf3\RULE60\10724273.raw
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293			150					155					160				
295	ATT	GTG	ATT	CAG	GCA	AGA	GCT	GTG	CCC	ATC	TTC	ATA		TTG	CTC	AGC	583
296	Ile	Val	Ile	Gln	Ala	Arq	Ala	Val	Pro	Ile	Phe	Ile	Glu	Leu	Leu	Ser	
297		165				_	170					175					
299	TCA	GAG	TTT	GAA	GAT	GTC	CAG	GAA	CAG	GCA	GTC	TGG	GCT	CTT	GGC	AAC	631
300	Ser	Glu	Phe	Glu	Asp	Val	Gln	Glu	Gln	Ala	Val	Trp	Ala	Leu	Gly	Asn	
	180				_	185					190	_			_	195	
303	ATT	GCT	GGA	GAT	AGT	ACC	ATG	TGC	AGG	GAC	TAT	GTC	TTA	GAC	TGC	AAT	679
304	Ile	Ala	Gly	Asp	Ser	Thr	Met	Cys	Arg	Asp	Tyr	Val	Leu	Asp	Cys	Asn	
305					200					205					210		
307	ATC	CTT	CCC	CCT	CTT	TTG	CAG	TTA	TTT	TCA	AAG	CAA	AAC	CGC	CTG	ACC	727
308	Ile	Leu	Pro	Pro	Leu	Leu	Gln	Leu	Phe	Ser	Lys	Gln	Asn	Arg	Leu	Thr	
309				215					220					225			
311	ATG	ACC	CGG	AAT	GCA	GTA	TGG	GCT	TTG	TCT	AAT	CTC	TGT	AGA	GGG	AAA	775
312	Met	Thr	Arg	Asn	Ala	Val	$\operatorname{Trp}$	Ala	Leu	Ser	Asn	Leu	Cys	Arg	Gly	Lys	
313			230					235					240				
												TGT					823
316	Ser		Pro	Pro	Glu	Phe	Ala	Lys	Val	Ser	Pro	Cys	Leu	Asn	Val	Leu	
317		245					250					255					
												CTG					871
		Trp	Leu	Leu	Phe		Ser	Asp	Thr	Asp		Leu	Ala	Asp	Ala	-	
	260					265					270					275	
												GAT					919
	Trp	Ата	Leu	ser		Leu	ser	Asp	GIY		Asn	Asp	ьуs	тте		Ala	
325	ama.	N III CI	CI A MI	aaa	280	CITI N	mam	700	7 (7 7	285	ama	~~ n	ama	аша	290	CIA III	0.67
												GAA					967
329	vai	TTE	Asp	295	СТУ	vai	Сув	Arg	300	ьеи	vai	Glu	ьец	305	Met	птъ	
	יי מ מ	СЪТ	тдт		стс	CTTT	тст	CCT		ጥጥር	CCA	GCT	стс		אאכי	ΔΤΤ	1015
												Ala					1013
333	11011	1155	310	Lys	val	var	DCI	315	nia	Dea	my	mu	320	CLY	Abii	110	
	GTC	ACA		GAT	GAT	ATT	CAG		CAG	GTA	АТТ	CTG		TGC	TCA	GCT	1063
												Leu					
337		325	1				330					335	-,	-1-			
339	CTG	CAG	AGT	TTA	TTG	CAT		CTG	AGT	AGC	CCA	AAG	GAA	TCT	ATC	AAA	1111
340	Leu	Gln	Ser	Leu	Leu	His	Leu	Leu	Ser	Ser	Pro	Lys	Glu	Ser	Ile	Lys	
341	340					345					350	-				355	
343	AAG	GAA	GCA	TGT	TGG	ACG	ATA	TCT	AAT	ATT	ACA	GCT	GGA	AAT	AGG	GCA	1159
344	Lys	Glu	Ala	Cys	$\mathtt{Trp}$	Thr	Ile	Ser	Asn	Ile	Thr	Ala	Gly	Asn	Arg	Ala	
345					360					365					370		
347	CAG	ATC	CAG	ACT	GTG	ATA	GAT	GCC	AAC	ATT	TTC	CCA	GCC	CTC	ATT	AGT	1207
348	Gln	Ile	Gln	Thr	Val	Ile	Asp	Ala	Asn	Ile	Phe	Pro	Ala	Leu	Ile	Ser	
349				375					380					385			
351	ATT	TTA	CAA	ACT	GCT	GAA	TTT	CGG	ACA	AGA	AAA	GAA	GCA	GCT	TGG	GCC	1255
	Ile	Leu		Thr	Ala	Glu	Phe		Thr	Arg	Lys	Glu	Ala	Ala	$\operatorname{Trp}$	Ala	
353			390					395					400				
												CAG					1303
	Ile		Asn	Ala	Thr	Ser	_	Gly	Ser	Ala	Glu	Gln	Ile	Lys	Tyr	Leu	
357		405					410					415					

### VERIFICATION SUMMARY

DATE: 08/27/2004 TIME: 11:48:31

Input Set : N:\Crf3\RULE60\10724273.raw
Output Set: N:\CRF4\08272004\J724273.raw

PATENT APPLICATION: US/10/724,273

L:29 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:30 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:54 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1
L:71 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=2
L:88 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3
L:134 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=4
L:151 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=5
L:204 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8
L:672 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=13
L:693 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=14
L:967 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=16
L:990 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=17
L:990 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=18
L:1019 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=19